

Methodology of Organizational Changes during the Implementation of Business-Activity Monitoring

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Abstract

The holistic cyclic methodology of carrying organizational changes during the implementation of monitoring of business activity performed by an economic player is presented; Based on the contextual analysis of the characteristics of the new technology that induces organizational changes, the content of identification and realization phases of support of transformations in the type of organizational culture is defined. The implementation of the proposed methodology allows to take into account the cyclicity in operation of an economic player and on basis of the monitoring of business activities to implement a new management technology.

Key words: organizational development, implementation of management technology, monitoring of business activity, conception of life-cycles, inducing changes in the characteristic of the system, transformation of the type of organizational culture.

1. Problem definition

There are unavoidable changes in management system within an organization aimed to maintain the highest level of its competitiveness, under the competitive development, according to the modern management concept, we understand the choice of such forms of existence of an economic player that ensure the most expected achievement of the desired economic effect in a short and long term perspective.

The necessity of focused organizational changes occurs in different situations. Let's name the most important of them. First of all, regular changes are rational as a response to changes in the environment. Secondly, organizational changes are actual during the transition of the organization to the next stage of its life cycle. Thirdly, the formed type of management must be reformed during there structing, mergers, acquisitions, changes of forms of ownership, the introduction of new technology in production and management and related to it changes in strategy, organizational structure, management culture.

The most important condition of adapt ability of an economic player becomes the analysis that allows to understand on which stage of the organization life-cycle, it is better to assess the potential and its components, to identify the main components in production process and management system which must be changed. The methodology of management development proposed in work (2010:34) gives the possibility to set the types of basic components in management system within an organization and effectively carry out the transformation. The authors of this methodology intended to use it for holistic support of work directed to harmonize the basic components of the control system in life-cycle stages of the organization. However, it became evident that the sphere of use of the techniques of this methodology is not limited only by the marked field.

Facing strategic uncertainty, the impact of social and political forces on market junctures, slowing in growth and having limited resources the economic player encounters the need for search of new management tools which are adequate to new realities. Under certain conditions the proposed methodology is applicable as a response to introduction of the new technology in production or management, which has specific characteristics and requirements to organizational environment.

The purpose of this article is to demonstrate the ability of adaptation of the mentioned methodology to organizational changes entailed by the introduction of new management techniques, the system of business activity monitoring within enterprises is taken as an example.

2. Description of the basic methodology

The basic methodology consists of four successive phases, such as: diagnostics, identification, realization and a phase of monitoring. Phase of diagnostics includes diagnosing blocks estimating an object and subject of management potential, stages of the life-cycle of the organization and its external environment; it allows to examine the current state of the organization.

The first blocks of the diagnostics phase assess the potential of an economic player - a set of resources and business opportunities which determine the prospects for its development under various environmental conditions. The results of diagnostics of the main components in the organization make the basis for their adaptation to the requirements of the environment and to the current stage in the life-cycle of the economic player.

The diagnostics of the environment makes it possible to assess whether the environment contributes to the development of an organization or hampers it at a particular stage of the economic player life-cycle.

The identification phase is designed to identify critical points in the development of an organization and to identify the specific values of components in the control system which hamper or v.v support the functioning of the economic unity. As part of this phase the choice of direction for organizational development is made, it is based on the regularities in life-cycle of the organization and on the market, to which the economic player belongs. The choice of the type for the organization management system is based on the analysis of its components. As for the strategy - it can be directed to the growth, stabilization or reduction. The organizational culture is characterized by such types as adhocracy, market, clan or bureaucracy. Autonomy, expansion, balance or contraction are the possible types of organizational structure.

The phase of realization is designed to make direct organizational changes: diagnostics of possible resistance from a side of personnel, implementation of organizational changes and monitor of the success after taken reforms.

The monitoring phase determines the need to return to the diagnostics phase for the implementation of adaptive features in the organization. With a slight change in the environment where the economic player operates, the phase of monitoring must be continued, in case of critical situations – the economic player must return to the phase of diagnostics.

The purpose of the last is the earliest detection of various failures and errors within the organization that helps to recognize the coming crisis, quickly react to it and more likely to get away from it or reduce the level of risk, and even to avoid catastrophic consequences.

3. Modification of the strategy during the introduction of new management techniques showed on an example of business activities monitoring systems

3.1. Diagnostics phase

First of all, the modification of the strategy applied to the above mentioned situation affects the diagnostics phase of the study. To support organizational changes during the introduction of technological innovations the first phase of the basic strategy should be extended by the unit called "Diagnostics of the new technology." This unit is designed to identify the specific characteristics of the new system and its requirements to the organizational environment (Fig. 1).

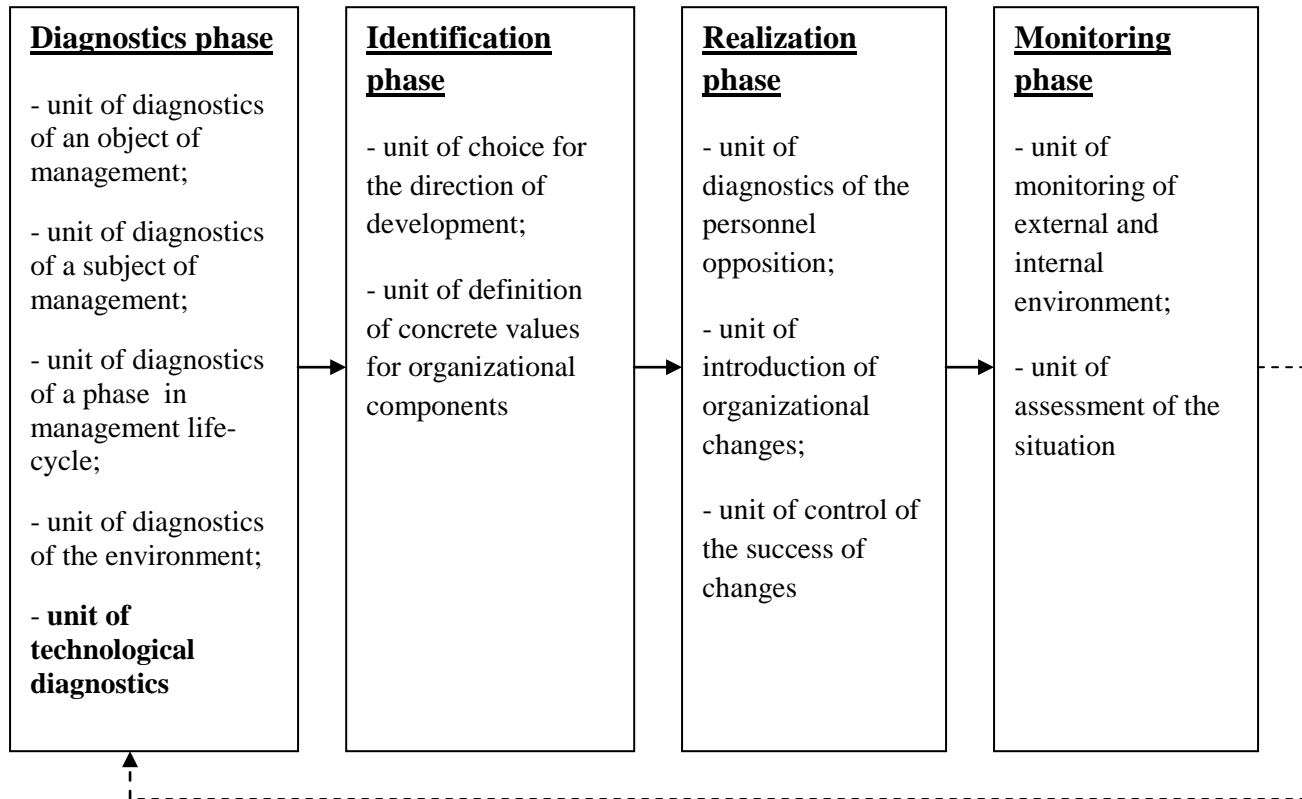


Figure1: The methodology of development of a system of organizational management for the introduction of a new technology

The basic prerequisites for the transition to real-time control system based on monitoring – development of information, software and hardware-based means. A key difference between the system of business activity monitoring from the majority of currently applied automated technologies is a view of business processes as dynamic series of events, the sequence of discrete transactions which take place in real time with the use of management procedures (2012:6). The new technology of automated management is seemed to be quite perspective for enterprises, that has already realized limits of controlling.

The technology of monitoring includes several groups of procedures. The first one involves the reflection of events instrumentally performed by any information system in the organization and from various data sources (corporate databases, system of contractors, Web-services, Internet and so on) on a personalized portal used by a manager.

The second group of procedures allows a manager to connect in real time the analysis of the event characteristics with involvement of internal and external sources, reporting and historical data. Particular importance is given to the presentation of information on personalized user's portals in a form which is more convenient for management decisions (including the suggested options of actions and graphic components: charts, graphs and reports).

Another group of procedures is designed for an automated assessment of the quality of taken by manager decisions using the set system of criteria.

The diagnostics of presence of features in the new technology which induce organizational changes involves contextual analysis of project documentation and is focused on the distribution of authority, responsibility and interactions between the management units. Let's analyze one of the project schemes using the mentioned schemes: monitoring of the event "The conclusion of a purchase contract" [2] (table).

Table: Scheme of event monitoring «The conclusion of a purchase contract»

| MONITORING OF AN EVENT “THE CONCLUSION OF A PURCHASE CONTRACT” | | |
|---|---|--|
| Characteristics of an event | Analytical procedures | Recommendations from a system for decision-making |
| Contractor | The counterparty rating (integrated assessment of the supplier's reliability), taking into consideration <i>the supply diversification regulations</i> | The conclusion of a treaty with this contractor is recommended or a list of suppliers in descending order of ratings & risk of delivery is offered. The decision is estimated according to the parameters. |
| Product Delivery term Amount | The assessment of the expected level of stock on a day of delivery of the product in comparison with the stock norms according to the data of <i>inventory turnover</i> and procurement | The amount and delivery dates, corresponding to regulations of stock management, are recommended. The decision is estimated according to the parameters. |
| Price | The assessment of delivery price: taking into consideration the influencing factors according to the data of <i>monitoring of environment</i> | The price range is recommended. The decision is estimated according to the parameters. |
| Terms of payment | The assessment of correspondence of the term of payment to <i>target criteria</i> and expected fund balance for the selected date (<i>flow of funds</i> business process) | The payment date in time within the target duration of payments to creditors is recommended. The decision is estimated according to the parameters. |

The contextual analysis of management procedures and interactions in the new technology shows that the manager gets a possibility to perform each transaction (event) in a business process by carrying out analysis of its characteristics in real-time and take decisions on his own, subject to the references from conjugate fields of management which are included into the horizontal cooperation system. In this case, he uses analytical "tips" and different variants of solutions which are formed by the monitoring system based on current, historical and predictable data which are relevant to the taken transaction and connected to it events. The possibility of assessment of the taken decision is provided by the system using specially designed for this purpose criteria. The analysis of the scheme showed as an example (the monitoring of a certain transaction in the purchase business process) in extrapolation of the taken technology in general helps to state the main features of the business activity monitoring, inducing organizational changes.

First of all, the increase of the degree of self-government on a basic level of management in the organization - in the centers of procurement, in places where expenses can appear, in sales centers and others, with the redistribution of responsibilities in favor of the mentioned link in the control system. It is provided by the analytical, technical, software and informational tools of monitoring.

Secondly, it forms horizontal informational links between the basic elements in the organizational structure. Так, принятие решений по параметрам контракта на закупку предполагает подключение в реальном времени аналитических сведений по управлению запасами, движению денежных средств, рыночных цен и прочего (выделено курсивом в таблице). Thus, decisions based on the parameters of the purchase contract require the use in real time of analytical data for the management of reserves, cash flow, market prices and other things (in italics in the table).

Thirdly, the creation of conditions for the automated control of the quality of management decisions taken by the manager who uses all characteristics of transactions.

3.2. Phases of identification and realization

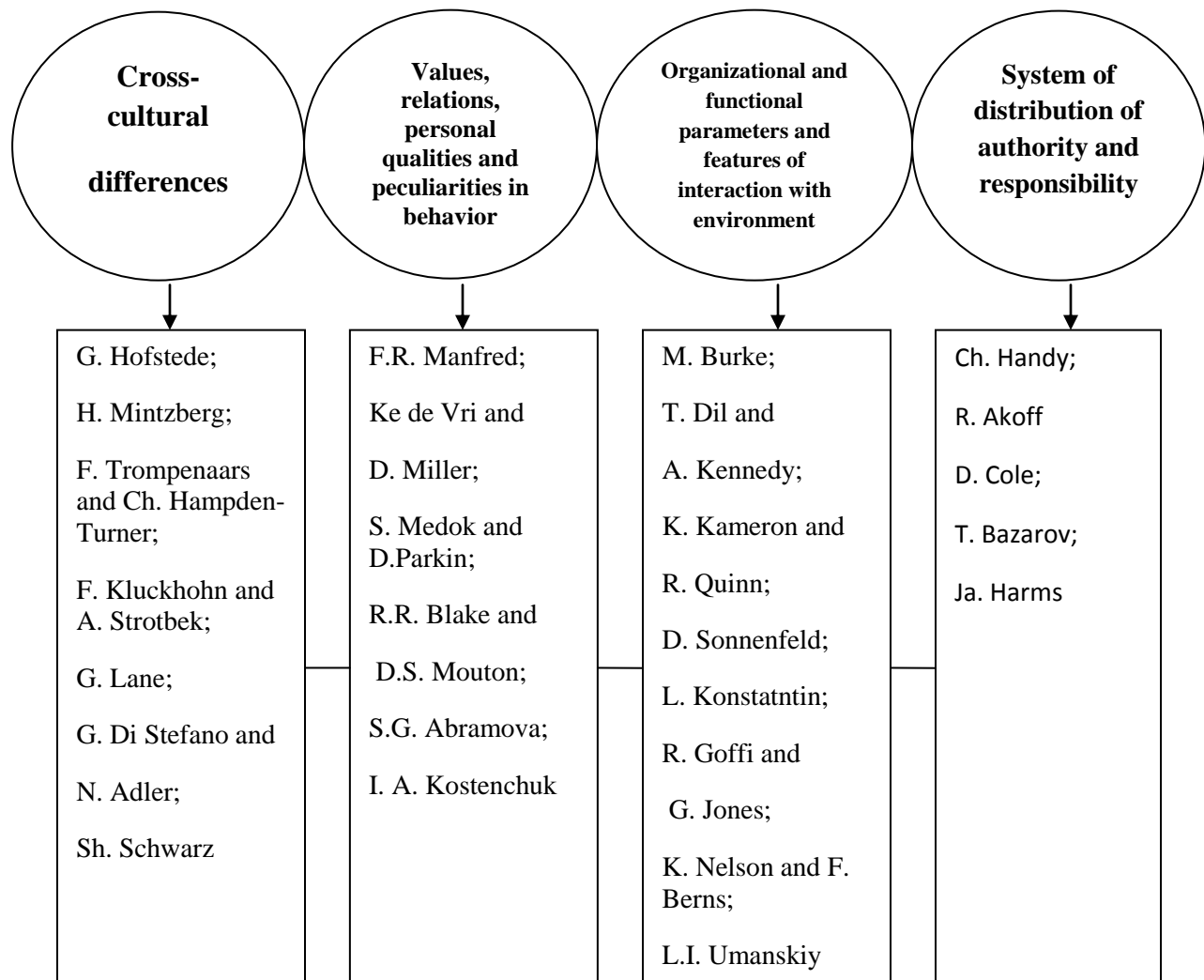
The marked features of the new control technology require the determination of the development directions for the organization and carrying out changes in the types of organizational structure and culture, as well as related to them methods of communication with staff.

Methodological support for the mentioned innovations is provided by the tools of identification and realization phases in basic strategy.

The implementation of measures to form new types of organizational components, in our opinion, should be conducted simultaneously with the introduction of the technology for business activity monitoring. Thus, exclusively "power" way of interaction, corresponding to the widely-spread at enterprises bureaucratic culture will not allow to fully realize the benefits of the new technology, presupposing the increase of level of self-government at a basic level of management. During the implementation of business activity monitoring system the process of separation of substantial parts of control functions, which before belonged to the higher level of management representatives into the automated procedure, also reduces the possibility of bureaucratic mode of interaction.

The combination of bureaucratic approach with its "rational persuasion" (with reforms based on facts and figures) and "compromise" (with an offer of compensations and partial control over the implementation of changes into the management to employees) will cause the interest and support of innovations from a side of workers. The mentioned features are typical for innovative culture in which the main points of development must be the units of management where the new strategy of business monitoring is implemented.

There are different types of cultures distinguished in literary sources, which depending on accepted criteria, is joined into groups, presented in Figure 2.



Authors of typologies

Figure 2: Classification of organizational cultures

In accordance with the purpose of the present study, according to the authors, it is preferable to use the criteria of the last type, linking the type of culture with the distribution of power, authority and responsibility in the organization.

Special features of the new control system, inducing changes in management culture, presuppose:

- significant redistribution of responsibility and increase at the level of self-government on the basic level of hierarchical control system at a production company;
- forming of close “horizontal” information relations between the elements belonging at the same level of organizational structure of management;
- change of the type of regulation and activities control at one or several levels of the structure.

The mentioned features contradict the bureaucratic type of organizational culture prevailing at most enterprises today, and these features are the basis for the diagnosis of the need for organizational changes (2012:20).

For the selection of a right type of organizational structure in terms of introduction of the new management technology experts are offered the characteristics of structures that need to be ranked by the following criteria:

- degree of importance;
- possibility of diversification without significant loss of control over the activity;
- flexibility in relation to the external and internal environment, the difficulty and efficiency of decision-making;
- possibility of revealing the initiative and independence; the content of control and motivation;
- other characteristics

While determining the level of centralization of the organizational structures and the choice of a particular type of structure it is necessary to take into account the objective conditions that influence the choice of the type of structure and its degree of centralization (2010:4).

The process of change, speaking about employees of the organization, according to the authors, should be based on certain principles, the most important of which are: openness, engagement, purposefulness, provision with resources and awareness.

Openness requires notification of all employees about the coming changes beforehand. Introduction of new ideas to staff will help them to understand the necessity and logic of coming events, to reduce excessive nervousness, fear of uncertainty, it is necessary to underline the care of employees from a side of administration and thus, to give constructive direction for future reforms, it will help to minimize rumors and intrigues.

The principle of *engagement* is associated with awareness of the need of changes and head’s willingness to mobilize all available resources for achievement of set goals, and from a side of employees – appreciation of new ideas. It is important to create a comfortable atmosphere within the organization and atmosphere of involvement into the process of change, to support reasoned suggestions for the configuration of the monitoring procedures, including the control and user’s interface.

Purposefulness means well-formalized goals and develops among employees confidence in their work and in benefits of the new technology, as well as the concordance of individual interests of employees with the overall objectives of the organization.

The principle of *provision with resources* is understood as the mobilization of all financial, human and information resources. Awareness is a process of providing the employees with the information about intermediate and final results of the implementation of monitoring system – it increases the confidence in success of future reforms.

During the process of reformation it is necessary to use all variety of forms of notification and personnel training programs, both individual and group. The process of transition to a new management technology in prepared organizational environment will be successful, if the head of the company is supported in his reforms by the entire staff of the company.

4. Conclusion

The holistic methodological support of all organizational changes as a single project, presented in this article, will increase the probability of completion of the work on scheduled terms and will allow to achieve the desired result.

The implementation of these four phases of the proposed strategy with presented additions in methodological support will not only allow to take into account the cyclical functioning of the business entity, but also to implement the technology of management based on business monitoring. The attention to questions of adaptation to new technologies will solve the problem of breaking the links between the basic structural elements of the organization: strategy, personnel, organizational structure, culture, technical and technological basis of the business entity and environment.

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